Hey guys!

We won the Excellence Award at the 2016 Worlds and we've seen some requests from people to see our Engineering Notebook. Therefore, we've decided to release a copy of it along with some pointers on what we think some people might miss when they work on their Notebook.

1. A **team introduction**. A group photo, maybe individual photos of each team member. Name each member and their roles so that the judges get to know you guys a bit better. Don't be afraid to say that a team member does seemingly small tasks such as 'Robot maintenance'. The judges want to know what you have contributed to in your team, from 'Battery-Boy' and Designing the robot to even things like the Online Challenges.

2. A **contents page** so that whoever's reading your Notebook can quickly go to a page that they want to read through again

Your Engineering Notebook should begin at the **very start of your seasonal journey**. You should use it to brainstorm about ideas of what can and can't work. When working on the Notebook, you should try to think that a person with no knowledge about VEX or Engineering is reading the book and they need to not only be able to recreate your robot but understand your various design changes and features.

3. We began with **analysing the season's game**. Talk about how it's best to play it. Any strategies, including their advantages and disadvantages. How can you score points? What can you do in auton? In NBN, we thought about hoarding, lifting, advantages and disadvantages of having a robot that can shoot only long or short range or both.

4. We then drew up a **design process model**. You should use this as a basis for everything that you do as you work on your robot this season and keep referring it as you pass the 'milestones' in your design journey. We found ourselves going through this design process multiple times as we went through the several iterations of our robot for NBN.

5. Throughout the season, we **wrote logs documenting everything we did** on the robot, our results and analysis of how we did at scrimmages, from what worked well to what didn't and what could be improved upon. We included images and diagrams to better illustrate our thoughts and workings and annotated them to help the judges understand them better.

6. Include a **copy of your code** that you used. We included a copy of our code for the two major iterations of our robot. Our code for our Nationals robot and Worlds robot, along with comments so that the Judges can understand why we chose to do what we did when writing the program.

7. **A timeline showing the major iterations** of your robot. Throughout the season, we found ourselves going through several different designs of our robot, in a quest to find out which design was the best for our requirements. It might also be a good idea to include what you learned from each iteration.

8. A **diagram of all the legal non shattering plastic** that you used on your robot that served a function. We got a piece of paper 12" x 24" (the max you're allowed to use) and drew a 1:1 diagram of all the polycarbonate we used to show the judges that we weren't exceeding the limit.

9. **A log of progress**. We kept a log of all our robot skills runs as we got to a more competitive stage. We wrote down our scores, how many bonus balls we scored and how many stacks we picked up (we used them as a way to measure how fast our run was).

If you guys need something to be cleared up, feel free to ask! If enough people want it, I might also put up some pointers for the Excellence Interview since it plays a huge part in getting points for the Excellence Award.

[Source](https://www.vexforum.com/index.php/19490-2915a-engineering-notebook-2016/0)

[PDF Example](https://drive.google.com/drive/folders/0B2Dg1KbmmkUrcmUxMEgxSFdMczQ)